

CLAIMS

1. Transparent fire-proof glazing comprising at least two glass sheets and an intumescent layer of material containing a phosphate-based compound, said layer being located between these two glass sheets, wherein the intumescent material comprises pyrogenous silica or a mixture of pyrogenous silica and alumina.
2. Glazing according to Claim 1, wherein the intumescent material is based on hydrogen phosphates of magnesium, calcium or aluminum.
3. Glazing according to Claim 1 or Claim 2, wherein the pyrogenous silica is composed of particles, the average grain size of which is in the range of between 7 and 40 nanometers.
4. Glazing according to any one of the preceding claims, wherein the quantity of pyrogenous silica in the intumescent layer is in the range of between 1 and 10% by weight of the composition forming this layer.
5. Glazing according to any one of the preceding claims, wherein the quantity of pyrogenous silica in the intumescent layer is in the range of between 2 and 6% by weight of the composition forming this layer.
6. Glazing according to any one of the preceding claims, wherein the composition of the intumescent layer contains from 18 to 40% by weight of water.
7. Glazing according to any one of the preceding claims, wherein the composition of the intumescent layer contains from 30 to 35% by weight of water.
8. Glazing according to Claim 4, 5 or 6, wherein the water content is adjusted so as to bring the refractive index of the composition to a value close to that of the pyrogenous silica, which it contains.
9. Glazing according to any one of the preceding claims, wherein the refractive index of the intumescent layer is brought close to that of the pyrogenous silica by adding glycerol, dimethyl sulphoxide or ethylene glycol in a proportion not exceeding 15% by weight of the composition of the intumescent layer.
10. Glazing according to any one of Claims 2 to 9, wherein the composition of the intumescent layer has an atomic ratio P/Mg (or Ca or Al) greater than 2.

11. Glazing according to any one of the preceding claims, wherein the composition of the intumescent layer additionally contains a salt or hydroxide of aluminum.

12. Glazing according to Claim 11, wherein the aluminum is present in such a quantity that the atomic ratio Al/Mg is in the range of between 0.1 and 1.

13. Glazing according to any one of the preceding claims, wherein the composition of the intumescent layer comprises a pyrogenous silica content and a water content such that, during preparation of the composition, this has a fluidity which permits it to be inserted between the sheets of the glazing, said composition forming a gel after approximately 24 hours.

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